

REMARKS

Applicants acknowledge with appreciation the withdrawal of the rejections in the July 22, 2008 Office Action. In the present Office Action, claims 1-3 and 5-9 stand rejected under 35 U.S.C. §103(a) for obviousness from the teachings of U.S. Patent No. 6,711,137 to Klassen et al. in view of U.S. Patent No. 7,324,524 to Kloth et al. Claims 10-27 stand rejected under 35 U.S.C. §103(a) for obviousness from the teachings of the Klassen et al. and Kloth et al. patents and further in view of U.S. Patent No. 6,654,914 to Kaffine et al.

In response to the foregoing rejections, independent claims 1, 10, and 21 have been amended to include limitations from claims 2 and 3; and claims 2, 3, and 20 have been cancelled. After the foregoing amendments, claims 1, 5-19, and 21-27 are pending in the application. Reconsideration of the rejections in view of the foregoing amendments and the following remarks is requested.

In the detailed rejection of the limitations of claim 2 which have been incorporated into independent claims 1, 10, and 21, it is alleged that column 2, lines 9-25 and column 8, line 60 – column 9, line 10 of the Klassen et al. patent disclose that the selected ones of the blocks consist of all of the blocks for which the data transmission rate was computed during the measurement when the network is known to be a bursty network.

Column 2, lines 9-25 of the Klassen et al. patent read as follows:

Further network testing involves sending bursts of pings to determine the loss rate of packets, from which the “internal packet size of the network” can then be determined. By this it is meant that the minimum device buffer size in the transmission path of the network can be discovered. The sending of bursts of pings of decreasing size is also described, the intent of which is to determine if smaller packets are prioritized over larger packets.

In this way, the following is determined:

the network path’s minimum buffer size (also referred to as “internal packet size”); and

the network’s short frame prioritization capability.

As is recognized in this art reference, “there will generally be a plurality of network hops between the test station and the remote station, each with its own bandwidth. In these circumstances, taking the reciprocal of the slope of the line as the bandwidth is equivalent to saying that: ...”

Column 8, line 60 – column 9, line 10 of the Klassen et al. patent read as follows:

Data concerning packet and/or file transfers and receipts data is stored in data store 28 and analyzed to determine, for example, but not limited to, the current performance of network 20 (including adherence to service-level agreements), the capacity limits of the network, and the current utilization of the network. The stored data is also used for analysis of “what if scenarios” involving analysis of the effect on network performance and capacity of user-specified changes to network bandwidth, changes to server or client location (e.g., data center move), implementation of network devices with changed latencies, or increase or decrease of network utilization. The data that is obtained and stored is also used for network tuning recommendations (e.g., connection window sizes) and to assist in problem determination and capacity planning (e.g., determining the network utilization level at which a specified service level will be compromised). This data is also used for service level compliance and network availability reporting.

As can be seen above, column 2, lines 9-25 of the Klassen et al. patent disclose dispatching “bursts of pings” of decreasing size in order to determine the loss rate of packets from which the “internal packet size of the network” (i.e., the minimum device buffer size in the transmission path of the network) can be determined. However, this section of the Klassen et al. patent does not disclose, teach, or suggest computing network throughput in any manner, especially by averaging data transmission rates of selected ones of the blocks (of data selected to fill a network packet), wherein the selected ones of the blocks consist of all of the blocks for which the data transmission rate was computed during measurement of a value representative of the transmit time of the block. Moreover, the Klassen et al. patent does not disclose, teach, or suggest determining network throughput differently based on the type of network, i.e., a bursty network or a non-bursty network, as is expressly required in amended claim 1.

Moreover, while column 2, lines 9-25 of the Klassen et al. patent disclose the transmission of bursts of pings of decreasing size, the Kloth et al. patent discloses transmitting data wherein the size of the block of the transmitted data is adequate to fill the available capacity of the packets (see Kloth et al. column 11, lines 29-46). Thus, combining the teachings of the Kloth et al. patent with those of the Klassen et al. patent would change the principal of operation disclosed in the Klassen et al. patent. Namely, each ping would fill the available capacity of the

packets versus pings of decreasing size. The conflicting teachings of two prior art references, however, cannot reasonably be viewed as suggesting their combination. *Karston Manufacturing Corp. v. Cleveland Golf Co.*, 242 F.3d, 1376, 1385 (Fed. Cir. 2001).

Moreover, utilizing pings that fill the available capacity of the packets would not enable the discovery of the minimum buffer size by the method disclosed in column 2, lines 9-25 of the Klassen et al. patent. To this end, if the buffer size is already known (the Kloth et al. patent) then why bother utilizing the method disclosed in column 2, lines 9-25 of the Klassen et al. patent to discover the minimum buffer size? If a proposed modification or combination of the prior art would change the principal of operation of the prior art being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Column 8, line 60 – column 9, line 10 of the Klassen et al. patent do not cure the foregoing deficiencies in column 2, lines 9-25 thereof. Specifically, column 8, line 60 – column 9, line 10 of the Klassen et al. patent disclose that data concerning packet and/or file transfers and receipts data is stored and analyzed to determine the current performance of the network. The data that is obtained and stored can also be used for network tuning recommendations and to assist in problem determination and capacity planning. This section of the Klassen et al. patent, however, does not distinguish between a bursty network and a non-bursty network and does not disclose, teach, or suggest computing network throughput by averaging the data transmission rates of all of the blocks for which the data transmission rate was computed during measurement (of a value representative of the transmit time of the block) when the network is known to be a bursty network.

In the detailed rejection of the limitations of claim 3 which have been incorporated into independent claims 1, 10, and 21, it is alleged that column 9, lines 47-67 of the Klassen et al. patent disclose that the selected ones of the blocks consist of only those blocks for which the data rate was computed to be less than a prescribed amount from the average data transmission rates of all the blocks transmitted during the measurement when the network is known to be a non-bursty network. Column 9, lines 47-67 of the Klassen et al. patent read as follows:

In step 128, ANSA calculates, in a manner to be more fully described hereafter, response time parameters, including the following values, from the set of long and short pings: apparent bandwidth, current available bandwidth, current unavailable bandwidth, apparent utilization, apparent latency, average queue time, apparent queue depth, apparent queue factor, apparent average network message length, apparent maximum user window size, estimated current user window size, apparent jitter, estimated path propagation delay, apparent device latency, estimated optimal network service level, estimated current network service level, and estimated network utilization level at which service level compliance is compromised.

In these calculations, described hereafter, ANSA treats pings that timeout (no response received) effectively as 100% utilization events in the calculations and also as having consumed the user specified ping timeout value.

Referring to FIG. 4, in accordance with a preferred embodiment of the invention, the apparent network speed analysis application (ANSA) 30 performs its throughput routine 34.

As can be seen, column 9, lines 47-67 of the Klassen et al. patent disclose that an apparent network speed analysis application (ANSA) calculates various response time parameters from a set of long and short pings. Initially, it should be noted that because this section of the Klassen et al. patent discloses the use of the set of long and short pings, it does not meet the limitations of independent claims 1, 10, and 21 that the size of each block of data be selected to fill a network packet. To this end, short and long pings will have different lengths and, as discussed above, the teachings of the Kloth et al. patent conflict with the Klassen et al. patent in this regard.

Moreover, this section of the Klassen et al. patent does not disclose that selected ones of the blocks consist of only those blocks for which the data rate was computed to be less than a prescribed amount from the average data transmission rate of all the blocks transmitted during the measurement when the network is known to be a non-bursty network. To this end, the Klassen et al. patent does not disclose, teach, or suggest the use of different techniques for determining network throughput based upon whether the network is a bursty network or a non-

bursty network. Rather, Fig. 6 of the Klassen et al. patent discloses that the type of data transmitted across the network will determine the network throughput. In contrast, the invention of independent claims 1, 10, and 21 utilize a block of data selected to fill a network packet. Thus, in contrast to the various data types and throughput tests shown in Fig. 6 of the Klassen et al. patent, the present invention will have a single network throughput which represents a worse case scenario since each block of data transmitted over the network is selected to fill a network packet.

Lastly, as noted above, the Klassen et al. and the Kloth et al. patents do not disclose, teach, or suggest the use of any technique specifically directed to a bursty network or a non-bursty network.

The Kaffine et al. patent, which was only relied upon for its disclosing presenting a diagnostic webpage to the user, does not cure the foregoing deficiencies in the teachings of the Klassen et al. and Kloth et al. patents.

Absent disclosing, teaching, or suggesting all the limitations of independent claims 1, 10, and 21 which have been amended to include the limitations of cancelled claims 2 and 3, the Klassen et al. patent, either alone or in combination with the Kloth et al. patent and/or the Kaffine et al. patent, cannot render obvious these claims, or claims 5-9, 11-19, and 22-27 dependent therefrom.

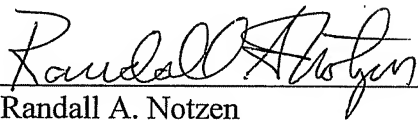
Application No. 10/671,154
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CONCLUSION

Based on the foregoing amendments and remarks, reconsideration of the rejections and allowance of claims 1, 5-19, and 21-27 are requested.

Respectfully submitted,

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